

Translation

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PATENT COOPERATION TREATY

PCT/EP2003/050676



PCT

10/535088

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference P-TARGET11WO | FOR FURTHER ACTION | See Form PCT/IPEA/416 |
| International application No. PCT/EP2003/050676 | International filing date (day/month/year) 01 octobre 2003 (01.10.2003) | Priority date (day/month/year) 02 décembre 2002 (02.12.2002) |
| International Patent Classification (IPC) or national classification and IPC B32B 27/32, B60N 3/04 | | |
| Applicant TARKETT SAS | | |

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36:
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:
 - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

| | |
|--|--|
| Date of submission of the demand 15 avril 2004 (15.04.2004) | Date of completion of this report 30 December 2004 (30.12.2004) |
| Name and mailing address of the IPEA/EP | Authorized officer |
| Facsimile No. | Telephone No. |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2003/050676

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1, 2, 4-9 _____, as originally filed/furnished
- pages* _____ 3 _____ received by this Authority on _____ 14 December 2004 (14.12.2004)
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ 1-12 _____ received by this Authority on _____ 14 December 2004 (14.12.2004)
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages _____ 1/1 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/50676

I. Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

Amendments

The amendments submitted with the letter dated 13 December 2004 do not cause the subject matter of the application to be extended beyond the content of the application as filed. As a result, said amendments comply with the provisions of PCT Article 34(2) (b).

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|------|-----|
| Novelty (N) | Claims | 1-12 | YES |
| | Claims | - | NO |
| Inventive step (IS) | Claims | 1-12 | YES |
| | Claims | - | NO |
| Industrial applicability (IA) | Claims | 1-12 | YES |
| | Claims | - | NO |

2. Citations and explanations

1. PCT Article 33(2)

1.1 Document D1, which is considered to be the prior art closest to the subject matter of claim 1, describes (the references between parentheses apply to said document) a multilayer structure including, in the following order from the outermost to the innermost layer, (a) an outer layer of an ionomer resin containing a graft polyethylene; (b) an intermediate layer of a metallocene polyethylene resin directly attached to layer (a); and (c) a second layer consisting of an ionomer resin containing a graft polyethylene, which layer (c) is directly attached to layer (b). Said document also mentions (see **claims 1-6; column 2, lines 30-51; column 4, line 65 to column 5, line 22; column 6, lines 16-21**) a production method for this laminate and the use of same in the domain of solar cells.

It follows that the subject matter of claim 1 differs from D1 in that the metallocene in the intermediate olefin layer is present at a ratio of 1 to 40 parts by weight of metallocene for 100 parts

by weight of olefin.

The subject matter of claim 1 is, therefore, novel (PCT Article 33(2)), as is the subject matter of the corresponding use claim 12.

- 1.2 Document D3 is considered to be the closest prior art for assessing the inventive step of claim 9. Said document describes a method for producing a double-layer laminate structure by extrusion blow moulding a single-layer film, then flattening the resulting bubble (see **claims 1, 6, 8 and 9; column 4, line 25 to column 5, line 45**).

The subject matter of independent claim 9 differs from document D3 in that the production method described in the present application involves four steps of: extrusion blow moulding a metallocene ionomer/polyolefin laminate, flattening the resulting film, splitting said film in two, and then laminating said film with a polymer substrate.

It follows that the subject matter of method claim 9 is novel (PCT Article 33(2)).

2. PCT Article 33(3)

- 2.1 The difference between the subject matter of claim 1 and document D1 is the selection of a metallocene concentration range and the effect of this difference is to allow an effective trade-off between the adhesion properties that result from adding said metallocene and control of the extrusion blow moulding process (see the description, page 6, lines -26). The problem that the present invention

is intended to solve can therefore be considered to be that of controlling the adhesion properties and the processability of the multilayer material.

None of the prior art documents describes or suggests the selection of a metallocene concentration range in order to solve the aforementioned problem and said selection is not at all obvious to a person skilled in the art. As a result, the solution to the problem, as proposed in claim 1 of the present application, is considered to involve an inventive step (PCT Article 33(3)).

An identical line of argument applies to the subject matter of claim 12. The use of the multilayer structure described in claim 1 in the domain of floor or wall coverings for vehicles is likewise not mentioned in the documents that constitute the closest prior art. As a result, the subject matter of claim 12 also appears to involve an inventive step (PCT Article 33(3)).

- 2.2 The effect of the difference between the subject matter of claim 9 and D3 is not known. The problem that the present invention is intended to solve can therefore be considered to be that of providing an alternative method for producing a multilayer structure.

Since the addition of the last two steps is not obvious from, or described or mentioned in, any of the available prior art documents, the subject matter of said claim 9 appears to involve an inventive step under the terms of PCT Article 33(3), as does that of the claims dependent on claim 9.